## **ABSTRACT**

Methods, devices and systems for performing quality assurance on an interrupted radiotherapy treatment are disclosed. The method includes measuring a first delivered dose distribution of an uninterrupted treatment, measuring a second delivered dose distribution of the same treatment that has been interrupted, and obtaining first and second images that represent the first and second delivered dose distributions, respectively. The method includes registering the first and second images so that they are mapped into the same physical space, and comparing the first and second images to determine any differences between the two images and hence any differences between the uninterrupted and the interrupted radiation treatments. The methods are useful in discerning the affects of system interruption on complex conformal radiation therapies, including IMRT.

CO002466.DOC